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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,735	09/25/2000	Amir Khalessi	ABUA-0028/B970750	1612

23377 7590 04/14/2004

WOODCOCK WASHBURN LLP
ONE LIBERTY PLACE, 46TH FLOOR
1650 MARKET STREET
PHILADELPHIA, PA 19103

EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
2683	15

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/582,735	KHALESSI ET AL.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17-21,24 and 26-40* is/are rejected.

7)☒ Claim(s) *16,22,23 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *14*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim1-40 have been considered but are moot in view of the new ground(s) of rejection.

1. An abstract is required.

2. The examiner removes his USC 112 rejection but objects to the claim language. The examiner believes the claim to contain a typo whereby TCP modem connects to a UDP server (?).

3. In the examiner's opinion, claim 38 may be allowable if rewritten with the objected to claims (eg. 16, 22-23 and 35) as well [also see "Allowable Section" at end of the office action which points out other combinations per telecon on 4-8-04].

Specification

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

Claim 25 objected to because of the following informalities: ***The claim teaches a TCP/IP radio communicating with a UDP server.*** These two protocols sit at the same layer of the OSI layer and do not readily communicate and hence require translation, yet there is no mention (or description in a figure) of any translation being performed by the applicant's design. Can the applicant please show where in the specification and in the figure(s) this is addressed? Note – merely stating that UDP/IP can communicate with TCP/IP is not sufficient without showing/stating translation hardware. Appropriate correction is required.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). **A reference to the Provisional Application is required on the first page of the application**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7-9, 11, 13-22 and 24-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. US Patent 5,636,122 in view of Girerd et al. US Patent 6,131,067 and ETE Wireless for Newton (hereafter Shah and Girerd and ETE).

As per **claims 1 and 38-40**, Shah teaches a method/apparatus for tracking vehicle location and computer aided dispatch (eg. crew locator system for distributing field crew position data) gathered from a global positioning system to a geographically distributed field crew (figure 7 shows a mobile unit with GPS receiver, #702 and radio link, #704/#706), comprising:

A wireless communication network (C5, L65-67 to C6, L1-2)

An enterprise computing system in communication with said wireless network, said enterprise computing system operable to receive field crew position data, store the position data and in response to requests for the position data, transmit the position data (figure 8 shows mobiles, #610 communicating with the enterprise computing system, #802, #804 and #806)

A first mobile field unit in communication with said wireless network, said first mobile field unit operable to gather position data transmitted from a global positioning system and transmit the field crew position data to said enterprise computing system (figure 8 shows mobile units, #610 with radio links #3 back to enterprise system and C10, L9-29).

But is silent on A second mobile unit in communication with said wireless network, said second mobile unit operable to request the field position data from said first mobile unit, receive the field position data from the first mobile unit and display the field position data

Wherein said first mobile unit is operable to transmit the field crew position data to said second mobile field unit

ETE Wireless communicator teaches having both a GPS receiver and two-way radio/cellular communication (page 1-2). One skilled realizes that the vehicle operators can use their radio/cellular communication devices for voice/data communications which provides for one operator to contact another operator directly to obtain his/her location (*either via data message or voice call*). While a mostly manual process, the first operator will be able to acquire the position/coordinates of the second operator and plug it into their ETE device to display it on a map (and/or display it in Shah's invention).

With further regard to claim 38, Shah teaches multiple mobile units (figure 8, #610) that can interact with the enterprise system **but is silent on** TCP/IP and third unit requesting data from the first mobile unit, first mobile unit receiving request to forward position data to third mobile unit and the first mobile unit transmitting the position data to the third mobile unit, third mobile unit receiving position data and displaying it.

(reference the ETE wireless discussion above for mobile-to-mobile location detection).

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

With further regard to claim 39, Shah teaches location (C10, L8-29 teaches lat/long) speed and direction of the mobile unit (C10, L43-51 teaches speed and "others" which would be direction). Since Shah does teach that lat/long is sent periodically (for example every 5 minutes) one skilled in the art can derive speed and direction based upon the data points collected. Shah **is silent on** "plane coordinates" but teaches converting lat/long into map coordinates which reads on the claim (see figures 1, 3 and 5) and from one of the plurality of mobile field units, said position data comprising lat/long, velocity and direction statistics – either the mobile can calculate said velocity/direction stats from lat/long, or the dispatch/control center can calculate them and transmit them to the mobile unit.

With further regard to claim 40, Shah **is silent on** the use of a web browser and the two files having references to each other. Girerd (above) teaches the use of a browser and the Internet and hence, HTML files. One skilled in the can provide for hyperlinks in each "file" such that one can reference the other via a simple click on said hyperlink (which reads on the claim).

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that TCP/IP and the Internet is used, to provide for world wide connectivity (via the Internet) and use of HTML files/functionality.

As per **claim 2**, Shah teaches claim 1 wherein the position data comprises values corresponding to location (C10, L8-29 teaches lat/long) speed and direction of the mobile unit (C10, L43-51 teaches speed and "others" which would be direction).

Since Shah does teach that lat/long is sent periodically (for example every 5 minutes) one skilled in the art can derive speed and direction based upon the data points collected.

As per **claim 3**, Shah teaches claim 1 comprising a third mobile operable to request field position data from the enterprise computing system (figure 8 shows multiple mobile units, #610) **but is silent on** and display the field position data.

Shah does teach a raster display which can display maps and the location of the user (figures 1-5) and one skilled in the art would provide for display capability with the mobile (ie. in the car, truck, etc.) so that they can locate themselves on a map along with surrounding street data. Further to this point is the microprocessor/computer in the mobile unit (figure 7, #700) which one skilled in the art would provide a display for.

As per **claim 4**, Shah teaches claim 3 comprising wherein said third mobile can request position data directly from said first mobile unit and display the position data (C11, L49-58 teaches a two-way messaging system between the mobiles, the dispatcher and the like which reads on the claim as providing position data among the mobiles via request AND C10, L8-28 teaches various wireless communication systems that can provide mobile-to-mobile service).

As per **claim 5**, Shah teaches claim 1 wherein said first mobile comprises a receiver operable to receive GPS data transmitted from GPS system, a modem operable to transmit the field position data over wireless system and a first processor (figure 7, #700, #702, #704 and #706).

As per **claim 7**, Shah teaches claim 3 wherein said third mobile comprises a display for displaying position data (see claim 3), server software for receiving position data (C10, L24-29) **but is silent on** a browser for browsing and interacting with web pages.

The mobile unit (figure 7) contains a computer/microprocessor which would contain a browser (and TCP/IP software) as is typically loaded on a PC purchased today. One skilled in the art would use the TCP/IP software to connect to the Internet via the radio/cellular network (as taught by Shah) which is commonplace today as well. Further to this point is Shah's teaching of CDPD (C10, L19) which is used to provide for file transfer to cellular users based on "bytes transmitted" rather than "airtime" (ie. CDPD allows a mobile user to connect to the Internet and not get charged by the minute).

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that a browser is used, to provide worldwide connectivity via the Internet to the mobile user.

As per **claim 8**, Shah teaches claim 1 wherein said enterprise computing system formats the position data into first file and second file prior to transmitting the position data (C10, L43-51 teaches various data is collected into a report/file).

As per **claim 9**, Shah teaches claim 8 **but is silent on** wherein said first file is a MIME-type file and said second file is an HTML-type file and contains a reference to said first file).

Shah teaches the use of a UNIX system (C6, L6-7) which is capable of supporting many different file types, including text, data, HTML, MIME, etc.. Hence, one skilled in the art would provide for translation of data into several file formats so as to interface to multiple users/systems. Shah also teaches processing/storing position data in three different ways/files (C3, L60-67 to C4, L1-3) which reads on the claim as well.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that HTML and MIME files are supported, so that the system can translate files into more than one file format to interact with many different users.

As per **claim 11**, Shah teaches claim 10 wherein said regularly scheduled intervals are timed intervals (C10, L24-29).

As per **claim 13**, Shah teaches claim 1 **but is silent on** wherein said wireless communication network supports TCP/IP communication protocol.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that TCP/IP is supported, to provide connectivity to the Internet.

As per **claim 14**, Shah teaches claim 1 wherein said mobile unit further comprises a mobile computing device having a computing processor (figure 7 shows the mobile unit with a computer/processor #700).

As per **claim 15**, Shah teaches claim 1 wherein said computing processor and said first processor are the same processor (figure 7, #700).

As per **claim 16**, Shah teaches claim 15 wherein said first processor is in communication with said radio modem via serial port (figure 7 shows processor connected to radio modem).

As per **claim 17**, Shah teaches claim 5 **but is silent on** wherein said first processor has instructions thereon for implementing a UDP server and a UDP client application for fielding requests for position data.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

The examiner notes that one skilled in the art would use the UDP protocol for over the air transactions to reduce the amount of handshaking that is utilized by TCP but not UDP (which is a "best effort" protocol). Error handling would be left to the upper-layers of the OSI model and/or the user's application program.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that UDP is supported, to provide a "best effort protocol" which uses less overhead than TCP/IP and conserves RF bandwidth.

As per **claim 18**, Shah teaches claim 5 **but is silent on** wherein said UDP server is operable to receive a command and to transmit position data.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

The examiner notes that one skilled in the art would use the UDP protocol for over the air transactions to reduce the amount of handshaking that is utilized by TCP but not UDP (which is a "best effort" protocol). Error handling would be left to the upper-layers of the OSI model and/or the user's application program.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that UDP is used on a server to receive/transmit, to provide a protocol with less overhead than TCP/IP.

As per **claim 19**, Shah teaches claim 18 **but is silent on** wherein said command is to determine the IP address and Port Address of the machine from which the command was sent and immediately transmit a UDP packet with position data to said IP address and Port Address.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

The examiner notes that one skilled in the art would use the IP Address and Port Address to uniquely identify another machine in order to communicate with it.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that IP/Port Address are used, to provide means to uniquely identify each machine.

As per **claim 20**, Shah teaches claim 18 wherein said command is to store a primary destination IP address and transmit position data to said primary address at specific intervals (C10, L25-29, data sent via TCP/IP to primary/enterprise system's IP address).

As per **claim 21**, Shah teaches claim 18 **but is silent on** wherein command is to store a secondary destination IP address and transmit position data to said secondary address at specified intervals.

The examiner takes **Offiicial Notice** that the use of a secondary server/destination is a typical design practice and provides for backup in case the primary server/destination fails. Communications equipment (such as routers) provide for "hot standby" routing should a server fail AND servers typically provide redundant components (RAID drives) and multiple/redundant processors.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that a secondary address/machine is used, to provide backup in the event that the primary address/machine fails.

As per **claim 24**, Shah teaches claim 1 wherein said enterprise computing system comprises an enterprise server for receiving and processing position data transmitted from said first mobile (figure 8, #802, #804 and #806 show "servers/applications" that process/transmit position data) **but is silent on** UDP.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent.

The examiner notes that one skilled in the art would use the UDP protocol for over the air transactions to reduce the amount of handshaking that is utilized by TCP but not UDP (which is a "best effort" protocol). Error handling would be left to the upper-layers of the OSI model and/or the user's application program.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that UDP is used, to provide a protocol that uses less overhead than TCP/IP and conserves RF bandwidth.

As per **claim 26**, Shah teaches claim 24 wherein said enterprise UDP server parses the position data and stores the position data in at least one file (C10, L43-56 teaches a report/file and disk storage AND C9, L63-65 teaches several databases).

As per **claim 27**, Shah teaches claim 24 wherein enterprise UDP server parses the position data and stores the position data in a database (C10, L43-56 teaches disk storage AND C9, L63-65 teaches several databases).

As per **claim 28**, Shah teaches claim 1 **but is silent on** wherein said enterprise computing system further comprises an HTTP server for receiving HTTP requests and a plurality of CGI scripts for interfacing with stored position data.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent. The examiner also interprets that one skilled in the art would provide for the server to host both HTTP and CGI services for data access as is commonly performed in industry today.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that an HTTP server is used that runs CGI scripts, to provide means for HTTP/Internet traffic and database access/processing via CGI scripts.

As per **claim 29**, Shah teaches claim 28 wherein said HTTP server is operable with wireless radio modem and can accept a position data request from said third mobile unit, process said position data request and return position data (C11, L49-58 teaches a two-way messaging system between the mobiles, the dispatcher and the like which reads on the claim as providing position data among the mobiles via request AND

C10, L8-28 teaches various wireless communication systems that can provide mobile-to-mobile service)..

As per **claims 30 and 31**, Shah teaches claim 28 **but is silent on** wherein said HTTP server upon receiving position data request causes a first/second of said plurality of CGI scripts to access/retrieve said database, generate a HTTP field unit list page and transmit said HTTP field unit list page to said HTTP server for transmitting to said third mobile unit said HTTP field unit list page causing a list of field units to be displayed when loaded in a web browser.

Shah teaches a two-way messaging system between the mobiles, the dispatcher and the like (C11, L49-58) AND also various wireless communication systems that can provide mobile-to-mobile service (C10, L8-28).

Girerd teaches a client-server based remote locator device that utilizes RF communications to ultimately connect to a server through the Internet (abstract and figure 1). One skilled in the art would provide for an HTTP server to support the client-server relationship and CGI scripts as needed to access the data and process/transmit said data to the client (eg. back through the Internet to the mobile user via cellular/RF).

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that a position request spawns CGI scripts to be run, to provide means for a request to cause access to the database (and processing) in order to return meaningful data to the requesting user/mobile.

As per **claim 32**, Shah teaches claim 31 wherein said position data comprises a first file and a second file (C10, L43-56 teaches a report/file).

As per **claim 33**, Shah teaches claim 32 **but is silent on** wherein said first file is an HTML file.

Girerd teaches a client-server based remote locator device that allows a cellular user to connect via the Internet to a remote computer (abstract and figure 1). The user of a browser and TCP/IP software is therefore inherent and one skilled in the art would transmit/receive files in HTML format via the Internet.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that HTML files are used, to provide means for connecting/browsing to the Internet.

As per **claim 34**, Shah teaches claim 32 **but is silent on** wherein said second file is a MIME file.

Shah teaches the use of a UNIX system (C6, L6-7) which is capable of supporting many different file types, including text, data, HTML, MIME, etc.. Hence, one skilled in the art would provide for translation of data into several file formats so as to interface to multiple users/systems. Shah also teaches processing/storing position data in three different ways/files (C3, L60-67 to C4, L1-3) which reads on the claim as well.

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that a MIME file is used, to provide means for supporting multiple file types so that many different users can be supported.

As per **claim 35**, Shah teaches claim 34 wherein said second file comprises values corresponding to location (C10, L8-29 teaches lat/long), velocity and direction. (C10, L43-51 teaches speed and "others" which would be direction).

Since Shah does teach that lat/long is sent periodically (for example every 5 minutes) one skilled in the art can derive speed and direction based upon the data points collected.

As per **claim 36**, Shah teaches claim 1 further comprising:

A third mobile unit in communication with said wireless network operable to request field position data from said first mobile unit, receive the field position data and display the position data wherein said first mobile unit is operable to transmit the field crew position data to said third mobile field unit. (C11, L49-58 teaches a two-way messaging system between the mobiles, the dispatcher and the like which reads on the claim as providing position data among the mobiles via request AND C10, L8-28 teaches various wireless communication systems that can provide mobile-to-mobile service).

As per **claim 37**, Shah teaches claim 1 wherein said first mobile unit is operable to simultaneously transmit the field crew position to said second field unit and said enterprise computing system. (C11, L49-58 teaches a two-way messaging system between the mobiles, the dispatcher and the like which reads on the claim as providing position data among the mobiles via request AND C10, L8-28 teaches various wireless communication systems that can provide mobile-to-mobile AND mobile-to-enterprise system service simultaneously [ie. via multiple RF voice/data channels]).

Claims 6 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Shah/Girerd/ETE and further in view of Karmel US Patent 6,353,743 and Wortham US Patent 5,155,689 (hereafter Karmel and Wortham).

As per **claim 6**, Shah teaches claim 5 wherein said processor has executable instructions thereon for communicating with said wireless radio modem, communicating with said receiver, processing position data received from said receiver (figure 7 shows mobile unit processor and modem for communicating, C10, L8-29 teaches transmitting position data automatically) **but is silent on** accepting requests for position data AND transmitting position data upon request

Karmel teaches a positioning system includes the ability to receive GPS signals and to receive and transmit packet radio signals. A user of the positioning system also has the ability to obtain information relevant to their actual position by transmitting a request, using packet radio, to a reference station. The reference station maintains an

information system and will transmit the requested information back to the user about their position. The information system includes a data storage memory and retrieval system and a direct link to the Internet for obtaining information in response to a user's request. The user is able to provide information for storage within the information system or on the **Internet** in order to compile the information available from the reference station. The positioning system also includes the ability to automatically transmit its position periodically (C3, L18-45). One skilled in the art would provide for the mobile unit to respond to requests as well (ie. is the reverse of Karmel's teachings). Further to this point is **Wortham**, who teaches the microprocessor "interrogates" the mobile cellular unit to obtain location data which reads on the claim (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that the mobile can respond to a request for position data, to allow the enterprise system to request and immediately receive position data so it doesn't have to wait the predetermined transmission period.

As per **claim 10**, Shah teaches claim 1 wherein said first mobile field unit transmits position data at regularly scheduled intervals (C10, L24-29) **but is silent on** immediately in response to a request.

Karmel teaches a positioning system includes the ability to receive GPS signals and to receive and transmit packet radio signals. A user of the positioning system also has the ability to obtain information relevant to their actual position by transmitting a request, using packet radio, to a reference station. The reference station maintains an information system and will transmit the requested information back to the user about their position. The information system includes a data storage memory and retrieval system and a direct link to the Internet for obtaining information in response to a user's request. The user is able to provide information for storage within the information system or on the **Internet** in order to compile the information available from the reference station. The positioning system also includes the ability to automatically transmit its position periodically (C3, L18-45). One skilled in the art would provide for the mobile unit to respond to requests as well (ie. is the reverse of Karmel's teachings). Further to this point is **Wortham**, who teaches the microprocessor "interrogates" the mobile cellular unit to obtain location data which reads on the claim (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Shah, such that the mobile can respond to a request for position data, to allow the enterprise system to request and immediately receive position data so it doesn't have to wait the predetermined transmission period.

Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Shah/Girerd/ETE and further in view of Dennison et al. US 6,324,404 (hereafter Dennison).

As per **claim 12**, Shah teaches claim 10 **but is silent on** wherein said regularly scheduled intervals are based on distance traveled by said mobile unit.

Dennison teaches user position within a cellular system (title) whereby the exact geographic location (EGL) is constantly updated, or alternately updated at various intervals, which intervals can be changed based on the time and/or distance traveled (C12, L50-55).

It would have been obvious to one skilled in the art to modify Shah, such that the interval is defined in distance traveled, to provide means to update the system based upon various parameters such as time, distance, speed, etc..

Allowable Subject Matter

Claims 16, 22-23 and 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Per telecon interview with applicant's attorney on 4-8-04, the examiner stated the following claim combinations may result in a more favorable outcome:

1. Rewrite claim 1 with claims 5, 14 and 16.

2. Rewrite claim 1 with claims 5, 18 and 19.

3. Rewrite claim 1 with claims 5, 20 and 21.

4. Rewrite claim 1 with claims 5, 28, 30 and 32-34..

5. Rewrite claim 1 with claims 5, 28 and 31-34.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
4-9-04